

SWP Water Quality Summary

September 6 to October 7, 2010

Electrical Conductivity: EC increased at all locations during the month. Concentrations ranged from 241 $\mu\text{S}/\text{cm}$ to 577 $\mu\text{S}/\text{cm}$ (145 mg/L to 346 mg/L), below the Article 19 Monthly Average Objective of 440 mg/L (733 $\mu\text{S}/\text{cm}$). At the end of the month, the highest concentration of 577 $\mu\text{S}/\text{cm}$ (346 mg/L) occurred at Check 29, while the lowest concentration of 299 $\mu\text{S}/\text{cm}$ (179 mg/L) occurred at Barker Slough. The 32-day average concentration at Harvey O. Banks Pumping Plant (HBP) was 546 $\mu\text{S}/\text{cm}$ (328 mg/L).

Bromide*: Concentrations exceeded the California Bay-Delta Authority (CBDA) Objective of 0.05 mg/L at all locations. Concentrations ranged from 0.07 mg/L to 0.30 mg/L. At the end of the month, Check 29 had the highest concentration of 0.30 mg/L, while the lowest concentration of 0.10 mg/L occurred at Barker Slough.

* Bromide concentrations are calculated values using linear regression equations using EC concentrations and are not as accurate as bromide concentrations from laboratory analysis.

Turbidity: Turbidity levels decreased at HBP, Check 29 and Barker Slough, but increased at Check 41 and Vallecitos. Turbidity ranged from 4.3 NTU to 48.2 NTU this month. At the end of the month, the lowest level of 4.3 NTU occurred at Check 29, while the highest level of 40.3 NTU occurred at Barker Slough. The 32-day average turbidity level at HBP on October 7 was 8.9 NTU with a -42.6% change.

Dissolved Organic Carbon (DOC): Concentrations decreased at HBP and Check 13, but increased at Edmonston. The DOC 32-day average concentrations were 2.2 mg/L at HBP, 1.7 mg/L at Check 13 and 3.3 mg/L at Edmonston.

Taste and Odor Compounds: MIB and geosmin concentrations in the SWP ranged from non-detect to 13 ng/L at Clifton Court Inlet, HBP, South Bay Aqueduct at Del Valle Check 7, O'Neill Forebay Outlet (Check 13), Check 41, Check 66, Castaic Lake and Silverwood Lake.

Ground water pump-ins to the California Aqueduct totaled 9,066AF. The break down of the total volume was:

- Arvin-Edison Water Storage District = 5 AF
- Kern Water Bank Authority (operates the Kern Water Bank Canal) = 20 AF
- Semitropic (2&3) Water Storage District = 9,041AF

As of October 7, 2010, no data was available for Devil Canyon due to maintenance driven station shut down.

Note:

The intent of the monthly water quality (WQ) summary is to acquaint state water contractors, scientists and interested parties with the status of water quality in the State Water Project (SWP). Your comments, questions and suggestions are welcome and should be directed to Cindy Garcia at 916-653-7213, or Austine Eke at 916-653-7227. To view WQ data from the automated

stations along the SWP, visit:

http://www.water.ca.gov/swp/waterquality/AutostationData/Autostation_map.cfm, and click on a station name on the map to link to the station's data on the California Data Exchange Center (CDEC) website.

To view the Edmonston daily AF pumping data, visit: www.water.ca.gov. Click on the "State Water Project" tab, and click on the "Operations Control" link. Look under the "Project-Wide Operations" header for the "Dispatcher's Daily Water Report."

SWP Water Quality Report

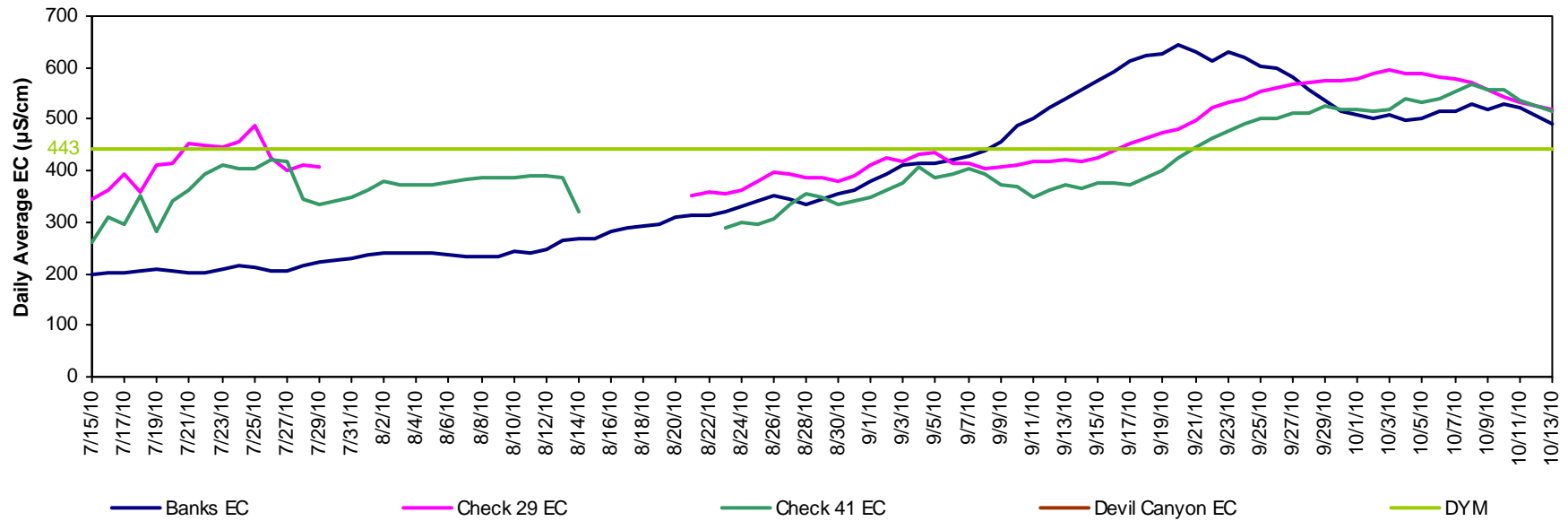
DWR Operations & Maintenance Water Quality Automated Station Data from September 6 to October 7, 2010

Automated sampling stations provide real time data by continuously measuring water quality conditions in the California Aqueduct.

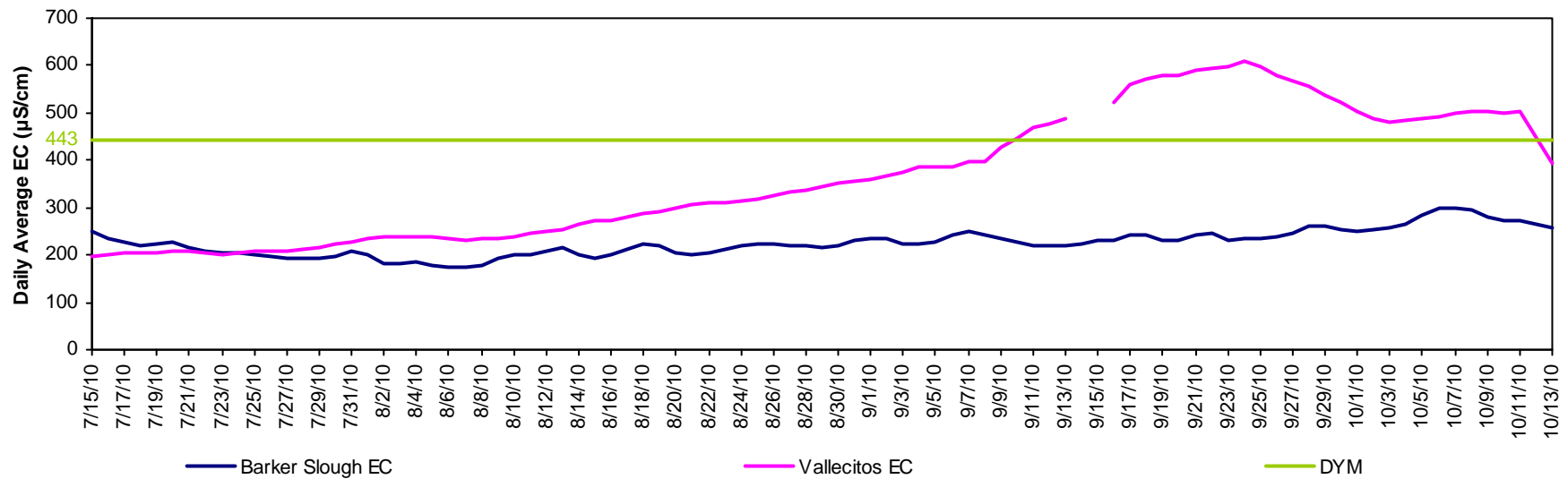
Water Quality Parameters	Objective	Range	Harvey O. Banks PP KA000331	Check 29 KA024454	Check 41 KA030341	Devil Canyon KA041288	NBA at Barker Slough KG000000	Vallecitos KB002250	Check 13 O'Neill Forebay Outlet KA007089	Edmonston PP Milepost 293.45
EC (µS/cm)	733**	9/06/2010	432	415	393	No Data	241	389		
		10/07/2010	515	577	554	No Data	299	490		
		% change	19.2	39	41	No Data	24.1	26		
		32-day Avg	546	502	449	No Data	245	544		
Bromide (mg/L)	0.05*	9/06/2010	0.18	0.17	0.16	No Data	0.07	0.15		
		10/07/2010	0.25	0.30	0.29	No Data	0.10	0.23		
		% change	38.9	76.5	81.3	No Data	42.9	53.3		
		32-day Avg	0.27	0.24	0.20	No Data	0.07	0.25		
Turbidity (NTU)		9/06/2010	13.6	4.9	11.9	No Data	48.2	6.6		
		10/07/2010	7.8	4.3	16.7	No Data	40.3	12.1		
		% change	-42.6	-12.2	40.3	No Data	-16.4	83.3		
		32-day Avg	8.9	6.7	13.7	No Data	41.7	9.3		
DOC (mg/L)	3.0*	9/06/2010	2.7						2.2	3.0
		10/07/2010	2.1						1.6	5.5
		% change	-22.2						-27.3	83.3
		32-day Avg	2.2						1.7	3.3
Taste & Odor Parameters	Range	Clifton Court KA000000	Harvey O. Banks PP KA000331	Lake Del Valle, Check 7 KB001632	Check 13 O'Neill Forebay Outlet KA007089	Check 41 KA030341	Check 66 KA040341	Castaic Lake	Lake Perris	Silverwood Lake
MIB (ng/L)	9/07/2010	4 - 9	9 - 13	10 - 13	ND - 8	5	6	ND	ND	3
Geosmin (ng/L)	10/04/2010	8 - 9	5 - 9	4 - 8	ND - 5	2	4	2 - 6	ND	3

*CBDA Objective; **Article 19 Monthly Average (converted from 440 mg/L to 733µS/cm); ND = Non-detect. T & O data from 9/7 to 10/04.

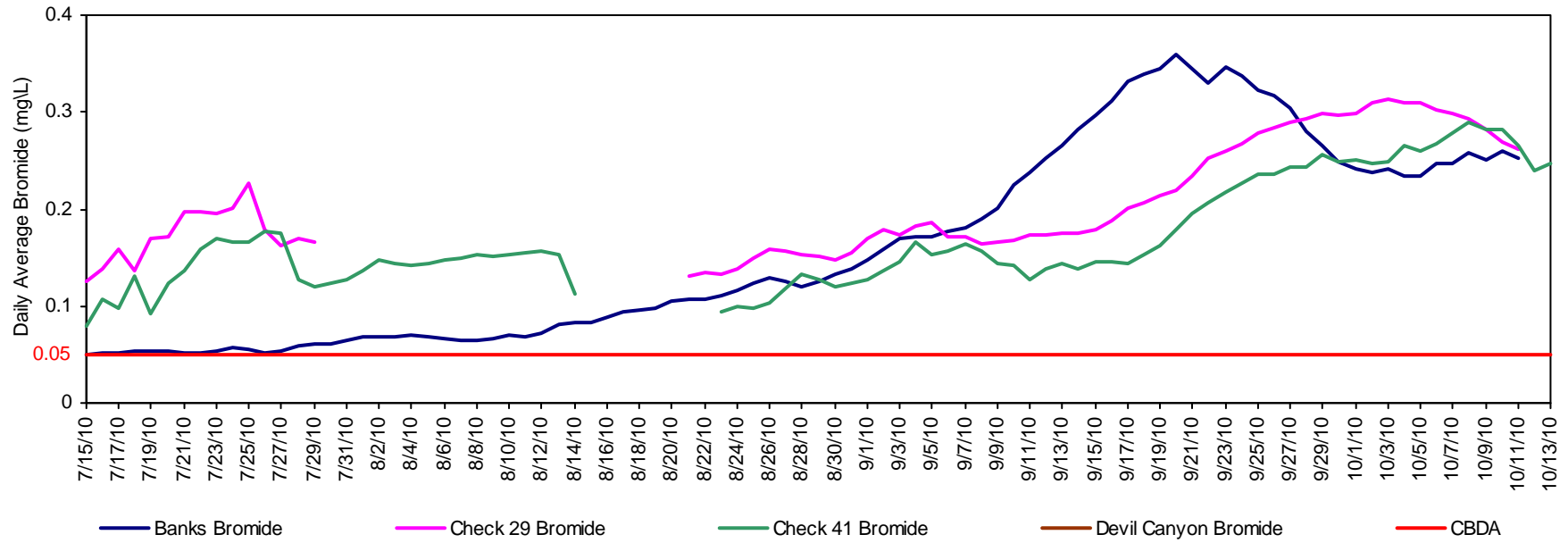
California Aqueduct - Electrical Conductivity



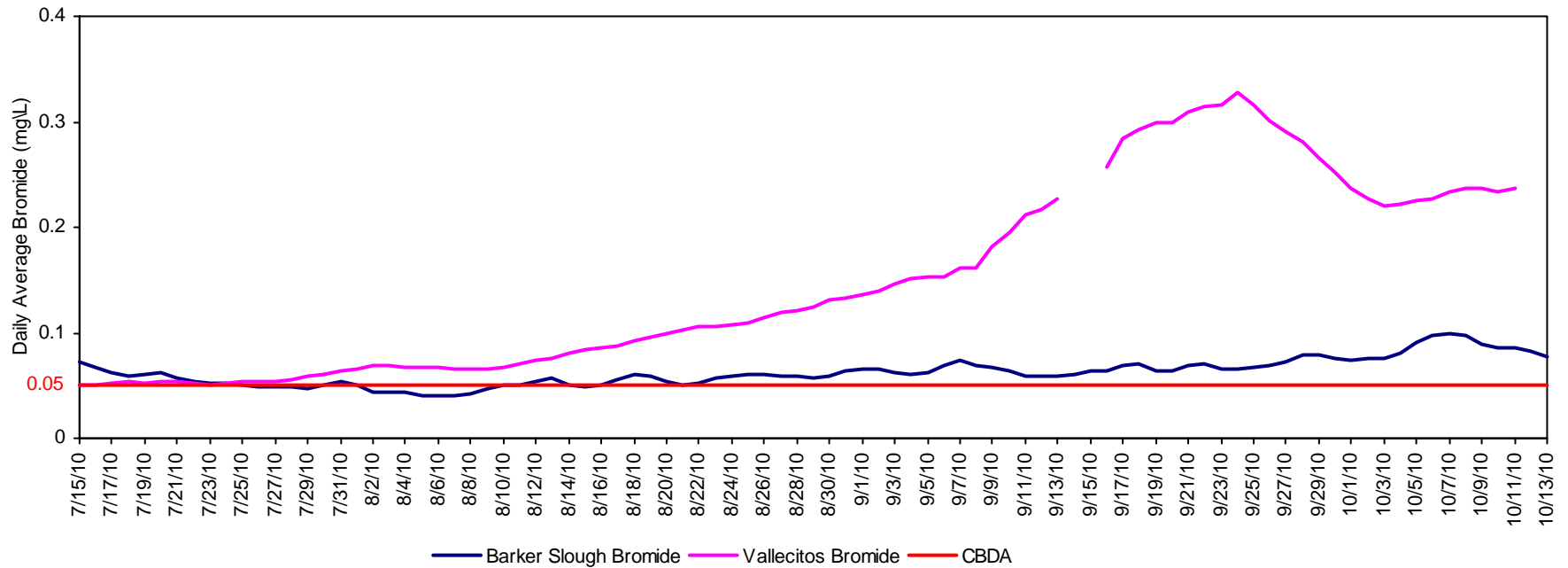
North and South Bay Aqueduct - Electrical Conductivity



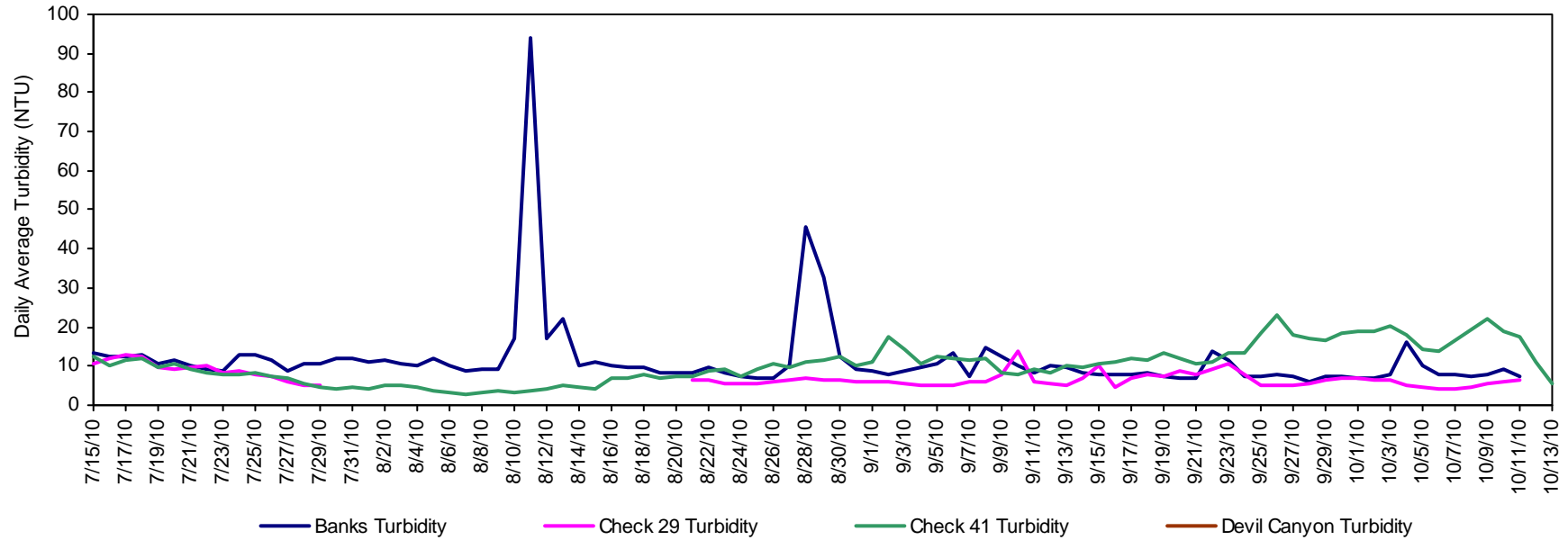
California Aqueduct - Calculated Bromide



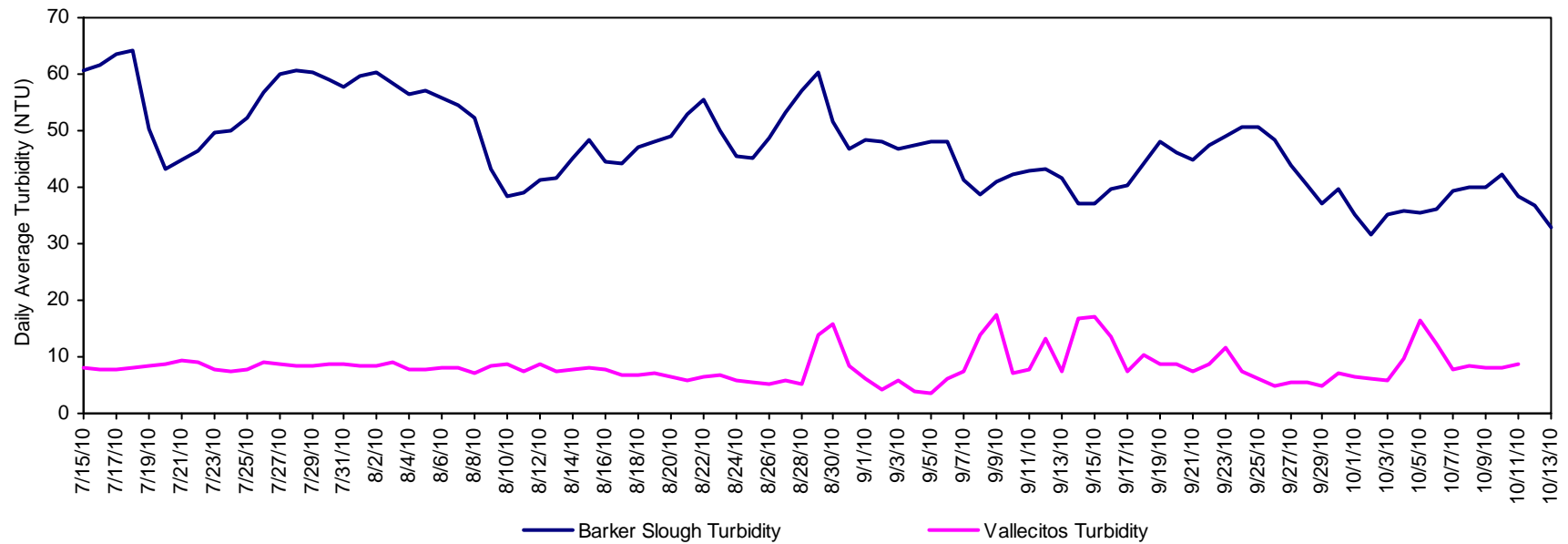
North and South Bay Aqueduct - Calculated Bromide



California Aqueduct - Turbidity



North and South Bay Aqueduct - Turbidity



California Aqueduct
Calculated Dissolved Organic Carbon

